AMENDMENT TO CLAIMS:

35. (currently amended) A composite structure for a vascular tubular member for repair of injury to a blood vessel within the body, said composite structure comprising;

A. flexible strands having axial componency interwoven with flexible strands having circumferential componency, said interwoven axial and circumferential flexible strands forming at least a portion of a tubular wall and ~~flexible strands~~ providing for sealing at crossover points,

B. structural strands substantially continuously interwoven ~~along with~~ by said flexible strands, said structural strands having a centerline that is located substantially in the center of said tubular wall and providing for functional characteristics for said vascular tubular member,

C. said structural and said flexible strands having substantially continuous contact with neighboring strands such that said ~~composite structure~~ tubular wall will not significantly leak blood serum or blood cellular elements.

36. (currently amended) A composite structure for a vascular tubular member for repair of injury to a blood vessel within the body, said vascular tubular member being deliverable with a smaller diameter to the blood vessel and adapted to expand to a larger diameter, said composite structure comprising;

A. ~~flexible strands and structural strands, said~~ flexible strands having axial componency ~~and being being~~ interwoven with ~~said~~ flexible strands having circumferential componency, said interwoven axial and circumferential flexible strands having a common tubular wall centerline and providing for sealing at crossover points,

B. ~~said~~ structural strands ~~being~~ substantially continuously interwoven ~~along with~~ by said flexible strands, said structural strands having a centerline that is substantially centered on the tubular wall centerline of said flexible strands, said structural strands

further providing for ~~providing kink resistance and~~, functional characteristics for said vascular tubular member,

C. said structural and said flexible strands ~~aligned with generally~~ having substantially continuous contact with ~~a~~ neighboring strands ~~thereby having tight gaps between said strands that~~ such that said composite structure will not significantly leak blood serum or blood cellular elements.

E1 37. (previously added) The composite structure of claim 35 wherein said tubular member is deliverable with a smaller diameter to the blood vessel and adapted to expand to a larger diameter within the blood vessel.

38. (previously added) The composite structure of claim 35 wherein said vascular tubular member is a bifurcated tubular member.

39. (previously added) The composite structure of claim 35 wherein said flexible strands are multifilament strands.

40. (previously added) The composite structure of claim 39 wherein said multifilament strands are formed from a polymeric material.

41. (previously added) The composite structure of claim of claim 39 wherein said multifilament flexible strands are formed from a material taken from a group which includes polytetrafluoroethylene, polyester, silicone, carbon, polyurethane, and composite materials.

42. (previously added) The composite structure of claim 39 wherein said multifilament strands are formed from expanded polytetrafluouroethylene.

43. (previously added) The composite structure of claim 35 wherein said structural strands are monofilament strands.

44. (previously added) The composite structure of claim 43 wherein said monofilament strands are formed from a metal.

45. (previously added) The composite structure of claim 43 wherein said monofilament strands are formed from a material taken from a group which includes stainless steel, nitinol, titanium, tantalum, platinum, metal alloys, and metal composites.

46. (previously added) The composite structure of claim 43 wherein said monofilament strands are formed from a material which is polymeric.

47. (previously added) The composite structure of claim 43 wherein said monofilament strands are formed from a material taken from a group which includes polytetrafluoroethylene, carbon, polyester, polyurethane, and polymeric composite materials.

48. (previously added) The composite structure of claim 35 wherein said structural strands are multifilament strands.

49. (previously added) The composite structure of claim 48 wherein said multifilament strands are formed from strands taken from a group which includes metallic strands, polymeric strands, carbon strands, composite strands, a mixture of metallic and polymeric strands, and composite strands formed from a mixture of metallic and polymeric fibers.

50. (previously added) The composite structure of claim 48 wherein said multifilament strands are polytetrafluoroethylene strands.

51. (previously added) The composite structure of claim 50 wherein said polytetrafluoroethylene strands are formed from expanded polytetrafluoroethylene.

52. (previously added) The composite structure of claim 35 wherein said flexible strands are monofilament strands.

53. (previously added) The composite structure of claim 52 wherein said monofilament strands are formed of a material taken from a group which includes metals, metal alloys, polymers, composite materials, and carbon.

54. (previously added) The composite structure of claim 52 wherein said monofilament strands are polytetrafluoroethylene strands.

55. (previously added) The composite structure of claim 54 wherein said polytetrafluoroethylene strands are formed of expanded polytetrafluoroethylene.

56. (previously added) The composite structure of claim of claim 35 comprising a woven structure having said structural strands extend in substantially a circumferential direction without substantial axial componency.

57. (previously added) The composite structure of claim 56 further comprising structural strands extending in substantially an axial direction.

58. (previously added) The composite structure of claim 35 wherein said composite structure is a braided structure wherein said structural strands extend with both circumferential and axial componency.

59. (previously added) The composite structure of claim 35 wherein said structural strands have at least circumferential componency to provide kink resistance.

60. (previously added) The composite structure of claim 35 comprising structural strands having axial componency in at least a portion of the tubular member.

61. (previously added) The composite structure of claim 60 wherein at least a fractional number of said structural strands having axial componency extend proximally beyond an inlet end of the vascular tubular member.

62. (previously added) The composite structure of claim 61 wherein said structural strands extending proximally beyond an inlet end of said vascular tubular member are attached to an attachment means that is positioned at a distance away and proximal said inlet end, said vascular tubular member being attached to the blood vessel remote from said inlet end.

63. (cancelled)

64. (new) A composite structure for a vascular tubular member for repair of injury to a blood vessel within the body, said composite structure comprising;

A. flexible strands having axial componency interwoven with flexible strands having circumferential componency, said flexible strands forming a generally cylindrical tubular wall that is described on a localized basis by a weave plane, said flexible strands providing for sealing at crossover points,

B. structural strands interwoven along with said flexible strands, said structural strands being interwoven substantially within said weave plane, said structural strands providing for functional characteristics for said vascular tubular member,

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C. said structural strands being interwoven substantially continuously with neighboring strands such that said composite structure will not significantly leak blood serum or blood cellular elements.